



Department of Energy

ROCKY FLATS OFFICE
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93-DOE-04565

MAY 04 1993

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4300 Cherry Creek Drive South
Denver, Colorado 80222-1530

Mr. Martin Hestmark
U. S. Environmental Protection Agency, Region VIII
ATTN: Rocky Flats Project Manager, 8HWM-RI
999 18th Street, Suite 500, 8WM-C
Denver, Colorado 80202-2405

Gentlemen:

The U.S. Department of Energy-Rocky Flats Office (DOE-RFO) has experienced significant delays to the Operable Unit No. 4 (OU4) Solar Evaporation Ponds (SEP) Phase I RFI/RI Program. This correspondence forwards a justification (including 4 supporting attachments) for requesting milestone extensions for the submittal of the OU4 Draft and Final Phase I RFI/RI reports. Primary justification for these delays includes unanticipated requirements associated with the logistics of field mobilization, discrepancies between the Interagency Agreement (IAG) schedule assumptions for OU4 and the actual durations incurred, and delays caused by the conditional approval of the OU4 Final Phase I RFI/RI Work Plan. Such delays have combined to a total duration of 18 months. However, aggressive task and schedule management efforts have allowed the recovery of several months, resulting in a projected schedule extension request of 11 months, as reflected in the proposed commitment schedule.

In accordance with the Rocky Flats Plant (RFP) IAG, DOE-RFO is hereby requesting a Table 6 milestone extension for OU4 SEP for the Draft Phase I RFI/RI Report and the Final Phase I RFI/RI Report. The IAG milestone extension is requested per "Chapter I, Part 42 Extensions, Paragraphs 221-227," of the IAG. The current IAG milestones and the requested commitment dates for the OU4 Draft Phase I RFI/RI Report and Final Phase I RFI/RI Report are as follows:

| <u>IAG Deliverable</u> | <u>IAG Schedule</u> | <u>Commitment Schedule</u> |
|-----------------------------|---------------------|----------------------------|
| Draft Phase I RFI/RI Report | 5-21-93 | 4-19-94 |
| Final Phase I RFI/RI Report | 10-18-93 | 9-17-94 |

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The DOE believes that all other future OU4 IAG milestones should be met on schedule, provided the U.S. Environmental Protection Agency (EPA) and the Colorado Department of Health (CDH) support the OU4 IAG compliance strategy described in the attached justification to this letter. We request a meeting with EPA and CDH to discuss these issues in detail at the earliest convenient time. Please feel free to contact me if you have any questions or comments pertaining to this matter.

Sincerely,



A. H. Pauole
Acting Manager

Enclosures

cc w/Enclosures:

A. Rampertaap, EM-453

J. Ciocco, EM-453

H. Belencan, EM-453

R. Schassburger, ERD, RFO

E. Lee, EG&G

JUSTIFICATION AND RATIONALE FOR EXTENSIONS TO OU4 DRAFT PHASE I RFI/RI REPORT AND FINAL PHASE I RFI/RI REPORT

Mobilization Delays

Unanticipated and previously unscheduled tasks were required for mobilization of the OU4 Phase I RFI/RI Field Program. Although DOE and EG&G Rocky Flats, Inc. (EG&G) expected numerous and complicated logistics for mobilization, it was not anticipated to require four months (August 3, 1992 - December 14, 1992). The RFP IAG allows one month for all RFI/RI mobilization tasks. The following list details requirements for mobilization of the OU4 Phase I RFI/RI Program.

1) Training:

- General Employee Training;
- Radiation Worker Training;
- Radiation Protection Training;
- Respirator Fit Test and Training;
- Building Indoctrination;
- Radio Communication Training;
- Standard Operating Procedure Training;
- Core Logging Training;
- Decontamination Pad Training;
- Drum Training; and
- Data Management Training.

2) General Permits:

- Integrated Work Control Package Waiver;
- Land Use Request;
- Buffer Zone Passes;
- Badges and Dosimeters; and
- Soil Disturbance Permit.

3) Equipment Procurement:

- Field Trucks;
- Drilling Rigs;
- Personal Protective Equipment;
- Decontamination Supplies;
- Radiation Detectors;
- Core Logging Supplies;
- Soil Sampling Equipment; and
- Vadose Zone Monitoring Equipment.

4) Documentation Requirements:

- Implementation Plan;
- Health and Safety Plan; and
- Vadose Zone Technical Memorandum.

5) Health and Safety:

- Equipment Calibration;
- Radiation Survey of Equipment;
- Property Transfer Forms; and
- Radiation Work Permits.

Additional complications and consequent impacts to the OU4 schedule were incurred by the following issues:

- In October 1992, the SEP IHSS 101 was designated a Radiological Controlled Area (RCA). The designation of the Ponds as an RCA has created additional unforeseen and unscheduled Health and Safety and logistical requirements;
- Support equipment, including a field trailer, equipment storage facilities, and radiation instrumentation was extremely difficult to obtain due to the number of remedial investigations conducted simultaneously at RFP;
- Numerous coordination meetings with various plant support organizations for OU4;
- The security requirements associated with accessing the RFP Protected Area (PA) were vastly more time consuming than expected and previously scheduled.

The total delays incurred for the OU4 mobilization tasks amount to three months.

IAG Assumptions

Critical IAG assumptions relative to activity durations were used for planning and implementing the OU4 Phase I RFI/RI field program which are no longer accurate or valid. Specific examples of durations exceeding the IAG durations for critical path activities include:

| <u>Critical Path Activities</u> | <u>IAG Duration</u> | <u>Actual Duration</u> | <u>Incremental Delay</u> | <u>Cumulative Incremental Delay</u> |
|---|-------------------------|----------------------------|------------------------------|---|
| Procurement (OU4 Work Plan Implementation) | 0 days | 126 days | 126 days | 126 days |
| Vadose Zone Instrumentation (16 boreholes at two days per borehole) | 0 days | 32 days | 32 days | 158 days |
| Radiological Analysis | 63 days | 75 days | 12 days | 170 days |
| Data Validation | 21 days | 45 days | 24 days | 194 days |
| Baseline Risk Assessment (Toxicity Tech Memo on Critical Path) | 0 days | 35 days | 35 days | 229 days (total) |

In general, a number of critical path activities were either not included or were assumed in the IAG to require less time than what was actually necessary for the OU4 implementation. Consequently, these activities have contributed to the OU4 Phase I RFI/RI schedule delay by approximately 229 working days or 11 months.

Work Plan Approval

The OU4 Draft Final Phase I Work Plan was submitted to CDH and EPA on November 26, 1991. Regulatory agency correspondence was received on December 20, 1992 indicating the work plan was not approved pending resolution of deficiencies. The revised OU4 work plan was submitted to CDH and EPA on February 5, 1992, and the statement of work (SOW) for implementation of the work plan was transmitted to procurement on February 14, 1992 as a competitive bid contract. Conditional approval for the OU4 Final Phase I RFI/RI Work Plan was received from CDH and EPA on May 8, 1992. Since the DOE and EG&G did not believe it would be cost effective for a subcontractor to propose on the implementation of the unapproved OU4 Work Plan, the work plan approval process delayed the procurement of the OU4 implementation. The total delay incurred from the OU4 Work Plan approval process was four months. The timeline contained in Attachment A outlines the scheduling impacts of the OU4 Phase I RFI/RI Work Plan regulatory and procurement processes.

SUMMARY OF JUSTIFICATION AND RATIONALE FOR EXTENSIONS

To summarize, the total cumulative delay incurred during the OU4 Phase I RFI/RI Program is as follows:

| <u>Reasons</u> | <u>Schedule Delay</u> |
|---|---------------------------|
| Unanticipated Mobilization Requirements | 3 Months |
| Inaccurate IAG Assumptions | 11 Months |
| OU4 Phase I RFI/RI Work Plan Approval Delay | 4 Months |
| Total Cumulative Delay | 18 Months |

PROPOSED STRATEGY FOR FUTURE IAG COMPLIANCE

The DOE-RFO, DOE Headquarters, and EG&G-RF consider the OU4 SEP program to be of extraordinarily high priority for RFP remedial activities. The DOE has taken every effort to mitigate the delay by assigning additional resources and conducting as many tasks as possible in parallel. However, logistics within the RFP and PA prevent the utilization of unlimited resources. Due to the high priority of this project, the DOE has developed a strategy to potentially recover the IAG schedule. A total reduction of eight months delay is targeted, resulting in a net delay of 10 months if we are completely successful in the future. A commitment for a net delay of 11 months is proposed. However, it is important to understand and recognize that this approach is extremely aggressive and costly, and may not be feasible for other OUs.

Attachment B is a graphical presentation of the DOE's strategy which reflects full-recovery of the IAG schedule subsequent to the OU4 Final Phase I RFI/RI Report. The DOE believes that the Interim Measure/Interim Remedial Action (IM/IRA) Decision Document, IM Design and Construction and Phase II IAG requirements can all be met with the support from EPA and CDH. The DOE and EG&G will have a contract awarded under the Master Task Subcontract (MTS) program in June 1993 which will include the following IAG requirements:

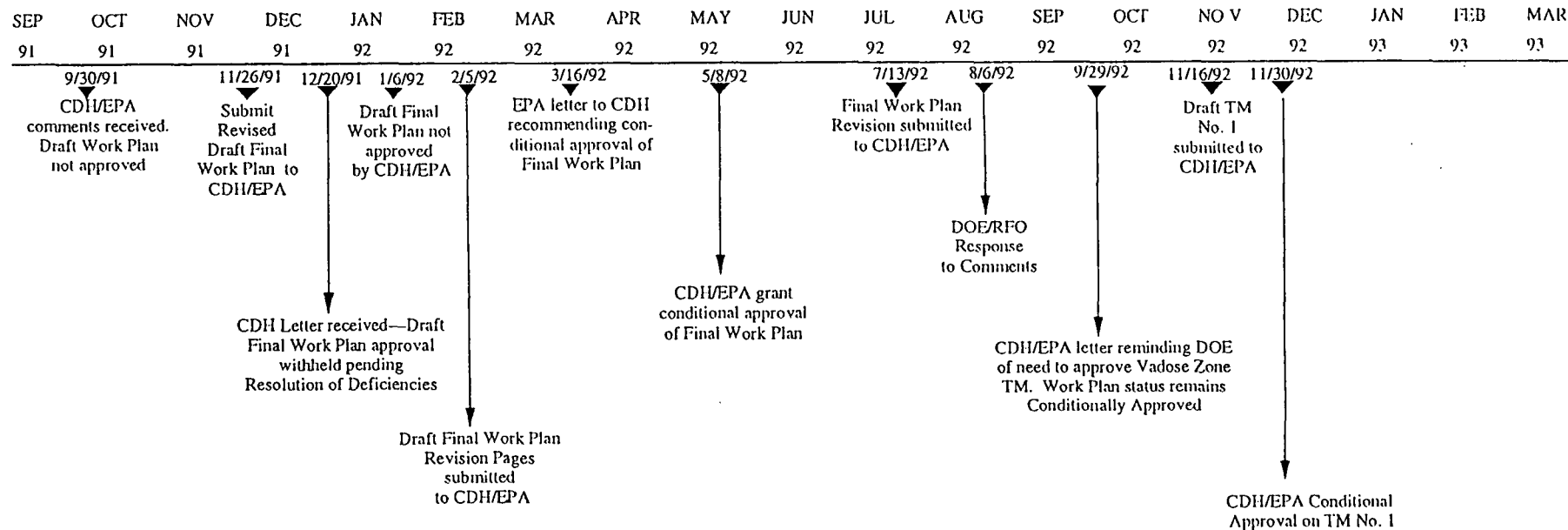
- Treatability Study (if applicable);
- IM/IRA Decision Document;
- Phase II RFI/RI Work Plans (Draft and Final);
- Phase II RFI/RI field activities; and
- Phase II RFI/RI Reports (Draft and Final).

By integrating these functions into one contract, the DOE and EG&G can save approximately 376 working days in procurement time and create a more efficient program by utilizing one team of contractors rather than multiple contractors for various requirements. The DOE believes that this approach, with CDH and EPA support, will enable future compliance with the IAG schedules for OU4.

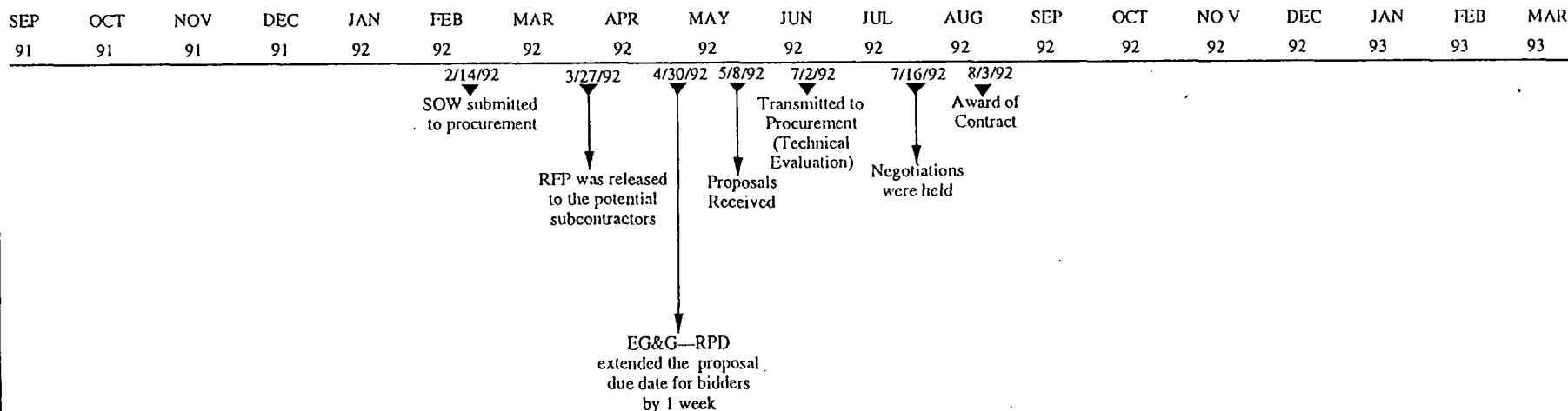
This recovery strategy is the basis of the OU4 Phase I RFI/RI Commitment Schedule contained in Attachment C. The schedule represents the DOE's best estimate for submitting the Phase I RFI/RI Draft and Final Reports and includes the mobilization tasks, durations of the tasks, and start and finish dates. The schedule also includes contingencies for potential delays occurring beyond the control of the DOE. Specifically, the laboratory analysis and data validation tasks were extended by two weeks each, resulting in a total extension of one month to the schedule. Through aggressive management and control of the project activities on the schedule, contingency for such impacts, if not actually experienced, would allow earlier completion of subsequent tasks and compression of the entire schedule. Similar tight management of the schedule of the Interceptor Trench System Diversion project schedule allowed actual completion of the project eight days prior to the date agreed upon by CDH, EPA, and DOE. Attachment D is a summary of the critical near term activities. In the event: 1) horizontal drilling is required beneath the 207 B&C series ponds, as a result of analyses of the liner and underlying soils, and/or 2) Technical Memoranda, in addition to those currently scheduled, are required, the proposed schedule will require revision.

ATTACHMENT A OU4 TIMELINE OF EVENTS

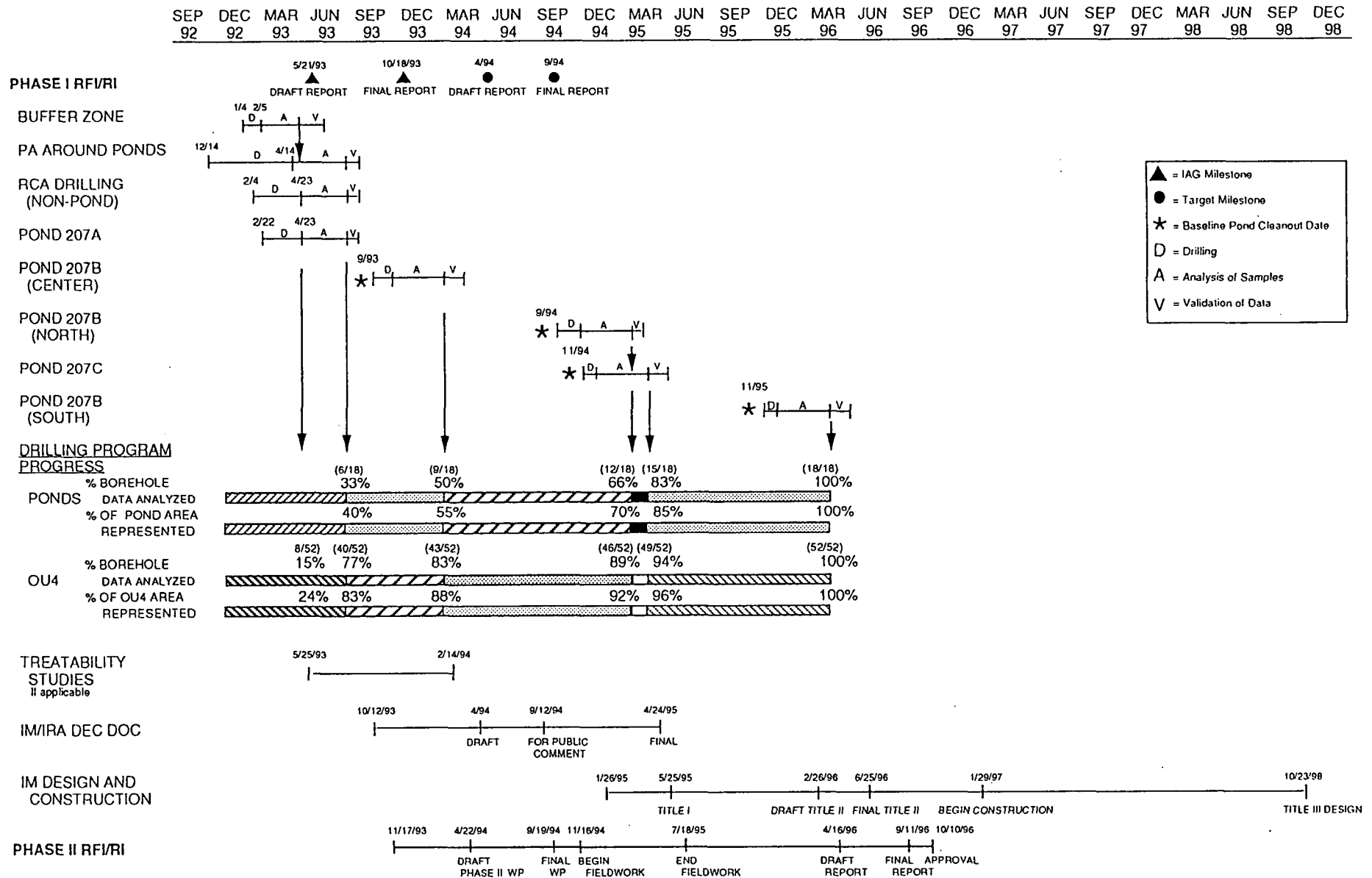
REGULATORY PROCESS



PROCUREMENT



ATTACHMENT B OU4 - SOLAR PONDS STRATEGY FOR IAG COMPLIANCE



ATTACHMENT C

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|----|---|----------|----------|-----------|--------------|
| 1 | REGULATORY (IAG) MILESTONES | 106d | 5/21/93 | 10/18/93 | |
| 2 | Submit Draft Phase I RFI/RI Report to EPA/CDH | 0d | 5/21/93 | 5/21/93 | |
| 3 | Submit Final Phase I RFI/RI Report to EPA/CDH | 0d | 10/18/93 | 10/18/93 | |
| 4 | | | | | |
| 5 | POND ACCESS/CLEAN AND DRY | 812d | 10/20/92 | 11/30/95 | |
| 6 | Pond 207A | 0d | 10/20/92 | 10/20/92 | |
| 7 | Pond 207B-Center | 0d | 9/30/93 | 9/30/93 | |
| 8 | Pond 207B-North (not accessible during phase I) | 0d | 9/30/94 | 9/30/94 | |
| 9 | Pond 207B-South (not accessible during phase I) | 0d | 11/30/95 | 11/30/95 | |
| 10 | Pond 207C (not accessible during phase I) | 0d | 11/30/94 | 11/30/94 | |
| 11 | | | | | |
| 12 | CONSTRUCT PA DECON PAD | 28.3w | 8/10/92 | 2/23/93 | |
| 13 | | | | | |
| 14 | WORK PLAN IMPLEMENTATION | 607d | 8/3/92 | 11/29/94 | |
| 15 | Contract Award | 0d | 8/3/92 | 8/3/92 | |
| 16 | Kick-Off Meeting - AE | 0d | 8/13/92 | 8/13/92 | |
| 17 | Kick-Off Meeting - EG&G | 0d | 8/18/92 | 8/18/92 | |
| 18 | PROJECT MANAGEMENT | 604.88d | 8/5/92 | 11/29/94 | |
| 19 | Weekly Project Meetings | 604.88d | 8/5/92 | 11/29/94 | |
| 20 | First Meeting | 1.5h | 8/5/92 | 8/5/92 | |
| 21 | Last Meeting | 0d | 11/29/94 | 11/29/94 | 488FF |
| 22 | Monthly Accrual Cost Tracking | 593d | 8/21/92 | 11/29/94 | |
| 23 | Submit First Report | 0d | 8/21/92 | 8/21/92 | 15 |
| 24 | Submit Last Report | 0d | 11/29/94 | 11/29/94 | 488FF |
| 25 | Bi-weekly Progress Tracking & Reports | 581d | 9/8/92 | 11/29/94 | |
| 26 | Start Progress Tracking | 0d | 9/8/92 | 9/8/92 | |
| 27 | Stop Progress Tracking | 0d | 11/29/94 | 11/29/94 | 488FF |
| 28 | Justification for Visit Forms | 570d | 8/18/92 | 10/24/94 | |
| 29 | Submit First Months Form | 1.8w | 8/18/92 | 8/28/92 | 17 |
| 30 | Submit Last Months Form | 0.8w | 10/19/94 | 10/24/94 | 488FS-30d |
| 31 | PROJECT PLANNING | 520d | 8/3/92 | 7/30/94 | 15 |
| 32 | Health & Safety Plan | 51d | 8/13/92 | 10/23/92 | |
| 33 | Prepare Plan | 16d | 8/13/92 | 9/4/92 | 16 |
| 34 | EG&G Review | 14d | 9/4/92 | 9/24/92 | 33 |
| 35 | Finalize Plan | 11d | 9/24/92 | 10/9/92 | 34 |
| 36 | Submit Final Plan | 0d | 10/9/92 | 10/9/92 | 35 |
| 37 | EG&G Final Review | 10d | 10/9/92 | 10/23/92 | 36 |
| 38 | Vadose Zone, Tech Memo No. 1 & SOPS | 172d | 8/24/92 | 4/20/93 | |
| 39 | Prepare Tech Memo | 37d | 8/24/92 | 10/13/92 | |
| 40 | Submit Draft Tech Memo to EG&G/DOE | 0d | 10/13/92 | 10/13/92 | 39 |
| 41 | EG&G/DOE Review | 13d | 10/14/92 | 10/30/92 | 40 |
| 42 | Incorporate Comments | 7d | 11/2/92 | 11/10/92 | 41 |
| 43 | Transmittal Processing - DOE/RFO | 2d | 11/11/92 | 11/12/92 | 42 |
| 44 | DOE/EG&G Final Combined Review | 2d | 11/13/92 | 11/16/92 | 43 |
| 45 | Transmit to CDH/EPA | 0d | 11/16/92 | 11/16/92 | 44 |
| 46 | EPA/CDH Review | 10d | 11/17/92 | 11/30/92 | 45 |
| 47 | EPA/CDH Conditional Approval of TM | 0d | 11/30/92 | 11/30/92 | 46 |
| 48 | Resolve Comments & Finalize Tech Memo | 11d | 12/1/92 | 12/15/92 | 47 |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|----|--|----------|----------|-----------|--------------|
| 49 | Transmit Final TM to DOE-RFO | 0d | 12/15/92 | 12/15/92 | 48 |
| 50 | Transmit Final TM to CDH/EPA | 0d | 12/15/92 | 12/15/92 | 48 |
| 51 | EPA/CDH Final Approval | 18w | 12/16/92 | 4/20/93 | 50 |
| 52 | Modifications to Field Activities, Tech Memo No. 2 | 98d | 1/26/93 | 6/10/93 | |
| 53 | EPA/CDH Meeting - Approval to Proceed w/ TM | 1d | 1/26/93 | 1/26/93 | |
| 54 | Prepare Tech Memo | 3.3w | 1/27/93 | 2/18/93 | 53 |
| 55 | Submit Draft TM to EG&G/DOE | 0d | 2/18/93 | 2/18/93 | 54 |
| 56 | EG&G/DOE Review | 3d | 2/18/93 | 2/23/93 | 55 |
| 57 | Incorporate Comments and Expand Memo | 2.9w | 2/23/93 | 3/15/93 | 56 |
| 58 | Submit Revised Draft TM to EG&G/DOE | 0d | 3/15/93 | 3/15/93 | 57 |
| 59 | EG&G/DOE Review | 2w | 3/16/93 | 3/29/93 | 58 |
| 60 | Incorporate Comments | 1.2w | 3/30/93 | 4/6/93 | 59 |
| 61 | Transmittal Processing - EPA/CDH | 2d | 4/7/93 | 4/8/93 | 60 |
| 62 | EPA/CDH Review | 4w | 4/9/93 | 5/6/93 | 61 |
| 63 | Resolve Comments & Finalize Tech Memo | 2w | 5/7/93 | 5/20/93 | 62 |
| 64 | Submit Final TM | 0d | 5/20/93 | 5/20/93 | 63 |
| 65 | EPA/CDH Final Approval | 3w | 5/21/93 | 6/10/93 | 64 |
| 66 | Environmental Evaluation, Tech Memo No. 3 | 190.5d | 8/19/92 | 5/12/93 | |
| 67 | Prepare EE Working Document | 82d | 8/19/92 | 12/10/92 | 16 |
| 68 | Submit Draft EEWD to EG&G | 0d | 12/10/92 | 12/10/92 | 67 |
| 69 | EG&G Review | 4w | 12/11/92 | 1/7/93 | 68 |
| 70 | Incorporate Comments into EEWP | 0.2w | 1/8/93 | 1/8/93 | 69 |
| 71 | Submit Revised Draft EEWD to EG&G/DOE | 0d | 1/8/93 | 1/8/93 | 70 |
| 72 | EG&G/DOE Review | 3w | 1/8/93 | 1/28/93 | 71 |
| 73 | Prepare Draft EE Tech Memo | 4.8w | 1/14/93 | 2/16/93 | 70 |
| 74 | Submit Draft EE Tech Memo to EG&G/DOE | 0d | 2/16/93 | 2/16/93 | 73 |
| 75 | EG&G/DOE Review | 2.7w | 2/16/93 | 3/5/93 | 74 |
| 76 | Incorporate Comments into TM | 1w | 3/5/93 | 3/12/93 | 75 |
| 77 | Submit Revised EE Tech Memo to EG&G/DOE | 0d | 3/12/93 | 3/12/93 | 76 |
| 78 | Transmittal Processing - EPA/CDH | 1d | 3/12/93 | 3/15/93 | 77 |
| 79 | EPA/CDH Review | 4w | 3/15/93 | 4/12/93 | 78 |
| 80 | EPA/CDH Conditional Approval for EE Tech Memo | 0d | 4/12/93 | 4/12/93 | 79 |
| 81 | Resolve Comments & Finalize Tech Memo | 1w | 4/12/93 | 4/19/93 | 80 |
| 82 | Submit Final EE Tech Memo to EG&G/DOE | 0d | 4/19/93 | 4/19/93 | 81 |
| 83 | Transmittal Processing - EPA/CDH | 2d | 4/19/93 | 4/21/93 | 82 |
| 84 | EPA/CDH Final Review and Approval | 3w | 4/21/93 | 5/12/93 | 83 |
| 85 | Training | 168d | 8/3/92 | 3/24/93 | 15 |
| 86 | General Employee Training | 154d | 8/18/92 | 3/19/93 | |
| 87 | First Class | 4h | 8/18/92 | 8/18/92 | |
| 88 | Last Class | 8h | 3/19/93 | 3/19/93 | |
| 89 | Radiation Worker Training | 156d | 8/19/92 | 3/24/93 | |
| 90 | First Class | 1d | 8/19/92 | 8/19/92 | |
| 91 | Last Class | 1d | 3/24/93 | 3/24/93 | |
| 92 | Radiation Protection Training | 3d | 9/3/92 | 9/7/92 | |
| 93 | September 3rd Class | 3d | 9/3/92 | 9/7/92 | |
| 94 | Respirator Fit Test & Training | 33d | 8/27/92 | 10/12/92 | |
| 95 | First Fit | 4h | 8/27/92 | 8/27/92 | |
| 96 | Last Fit | 8h | 10/12/92 | 10/12/92 | |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|--|----------|----------|-----------|---------------------|
| 97 | Building Indoctrination | 80.06d | 8/20/92 | 12/10/92 | |
| 98 | First Indoctrination | 0.5h | 8/20/92 | 8/20/92 | |
| 99 | Last Indoctrination | 0.5h | 12/10/92 | 12/10/92 | |
| 100 | Radio Communication Training | 73d | 8/31/92 | 12/10/92 | |
| 101 | First Training | 0d | 8/31/92 | 8/31/92 | |
| 102 | Last Training | 0d | 12/10/92 | 12/10/92 | |
| 103 | SOP Training | 89d | 8/3/92 | 12/4/92 | |
| 104 | First Training | 0d | 8/3/92 | 8/3/92 | |
| 105 | Last Training | 0d | 12/4/92 | 12/4/92 | |
| 106 | Core Logging Training | 75d | 8/7/92 | 11/19/92 | |
| 109 | Decontamination Pad Training | 0.1w | 11/5/92 | 11/5/92 | 116 |
| 110 | Drum Training | 2h | 12/9/92 | 12/9/92 | |
| 111 | RFEDS Training | 16.16d | 11/16/92 | 12/8/92 | |
| 114 | Site Base Map Preparation | 13w | 9/8/92 | 12/7/92 | 17 |
| 115 | Mobilization | 132d | 8/3/92 | 2/2/93 | |
| 151 | Plan of the day meetings | 455d | 11/2/92 | 7/30/94 | |
| 154 | | | | | |
| 155 | FIELDWORK | 379d | 11/10/92 | 4/22/94 | 37 |
| 156 | Ground Water Level Measurements | 14w | 3/17/93 | 6/22/93 | |
| 157 | Obtain borehole/utility clearances | 61d | 12/10/92 | 3/5/93 | |
| 158 | First Borehole Clearance | 0d | 12/10/92 | 12/10/92 | |
| 159 | Last Borehole Clearance | 0d | 3/5/93 | 3/5/93 | 170,174,180,185,189 |
| 160 | Pre-Work RAD Survey | 61d | 12/10/92 | 3/5/93 | |
| 161 | Start Survey | 0d | 12/10/92 | 12/10/92 | 158SS+1d |
| 162 | Finish Survey | 0d | 3/5/93 | 3/5/93 | 159FF |
| 163 | OU Wide Radiological Survey | 100d | 11/12/92 | 4/1/93 | |
| 164 | Start RAD Survey | 0d | 11/12/92 | 11/12/92 | |
| 165 | Finish RAD Survey | 0d | 4/1/93 | 4/1/93 | 189FF |
| 166 | OU Wide Surface Soil Sampling | 89d | 12/11/92 | 4/14/93 | |
| 167 | Random Surface Soil Sampling | 3.6w | 12/11/92 | 1/5/93 | |
| 168 | Discrete Surface Soil Sampling | 2w | 4/1/93 | 4/14/93 | 163 |
| 169 | Around Ponds (xb,xv,xi,xp) | 85d | 12/14/92 | 4/9/93 | |
| 170 | Borehole Drilling and Sampling/Piezometer Installation | 11.3w | 12/14/92 | 3/2/93 | |
| 171 | Core Logging | 15.2w | 12/25/92 | 4/9/93 | 170SS+2w |
| 172 | Vadose Zone Monitoring Installation | 3.2w | 2/9/93 | 3/2/93 | 176 |
| 173 | Interceptor Trench System (xb,xv,xi,xp) | 32d | 12/28/92 | 2/9/93 | |
| 174 | Borehole Drilling and Sampling/Piezometer Installation | 5.4w | 12/28/92 | 2/2/93 | |
| 175 | Core Logging | 4.4w | 1/11/93 | 2/9/93 | 174SS+2w |
| 176 | Vadose Zone Monitoring Installation | 1.8w | 1/21/93 | 2/2/93 | 174FF |
| 177 | Pond 207A (xb,xv,xi,xp) | 111d | 11/10/92 | 4/13/93 | |
| 178 | Radiological Survey | 5d | 11/10/92 | 11/16/92 | |
| 179 | Geophysics | 5d | 12/4/92 | 12/10/92 | |
| 180 | Borehole Drilling and Sampling | 4.6w | 3/10/93 | 4/9/93 | |
| 181 | Core Logging | 3w | 3/24/93 | 4/13/93 | 180SS+2w |
| 182 | Vadose Zone Monitoring Installation | 1.6w | 3/22/93 | 3/31/93 | |
| 183 | Earthen Ponds "Original Ponds" (xb,xv,xi,xp) | 63d | 1/13/93 | 4/9/93 | |
| 184 | Geophysics | 2d | 4/8/93 | 4/9/93 | |
| 185 | Borehole Drilling & Sampling | 8.4w | 1/13/93 | 3/11/93 | |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|--|----------|----------|-----------|-----------------------------|
| 186 | Core Logging | 7.6w | 1/27/93 | 3/19/93 | 185SS+2w |
| 187 | Vadose Zone Monitoring Installation | 1.4w | 3/3/93 | 3/11/93 | |
| 188 | Radiologically Controlled Area (RCA) (xb,xv,xi,xp) | 77d | 1/8/93 | 4/26/93 | |
| 189 | Borehole Drilling & Sampling | 15.4w | 1/8/93 | 4/26/93 | |
| 190 | Core Logging | 13.2w | 1/22/93 | 4/23/93 | 189SS+2w |
| 191 | Vadose Zone Monitoring Installation | 3d | 2/22/93 | 2/24/93 | |
| 192 | Drum Sampling | 1w | 4/20/93 | 4/26/93 | 189FF |
| 193 | Seismic Reflection/Refraction | 2w | 4/26/93 | 5/7/93 | 177FF |
| 194 | Land Survey | 181d | 11/18/92 | 7/29/93 | |
| 195 | Start Land Survey | 0d | 11/18/92 | 11/18/92 | 164SS+1w |
| 196 | Finish Land Survey | 0d | 7/29/93 | 7/29/93 | 204FF-1w |
| 197 | Other Vadose | 64d | 3/22/93 | 6/17/93 | |
| 198 | Guelph Permeameter Tests | 4.8w | 3/22/93 | 4/22/93 | 182SS |
| 199 | Soil Gas Survey | 2w | 4/23/93 | 5/6/93 | 198 |
| 200 | Infiltrometer Installation | 6w | 5/7/93 | 6/17/93 | 199 |
| 201 | Vadose Monitoring Activities | 260d | 4/26/93 | 4/22/94 | |
| 202 | Lysimeter Sampling | 52w | 4/26/93 | 4/22/94 | 182FS+3.4w |
| 203 | Infiltrometer Testing | 6w | 5/28/93 | 7/8/93 | 200FS-3w |
| 204 | Demobilization | 4w | 7/9/93 | 8/5/93 | 203,188,183,177,173,169,166 |
| 205 | | | | | |
| 206 | LAB ANALYSIS/TURNAROUND | 295d | 12/14/92 | 1/28/94 | |
| 207 | Around Ponds | 196.5d | 12/14/92 | 9/14/93 | |
| 208 | Non Rad Data Lab Analysis/Turnaround | 116.5d | 12/14/92 | 5/25/93 | |
| 209 | Begin Non Rad Lab Analysis/Turnaround | 0d | 12/14/92 | 12/14/92 | 170SS |
| 210 | End Non Rad Lab Analysis/Turnaround | 0d | 5/25/93 | 5/25/93 | 170FS+60d |
| 211 | Rad Data Lab Analysis/Turnaround | 146.5d | 12/14/92 | 7/6/93 | |
| 212 | Begin Rad Lab Analysis/Turnaround | 0d | 12/14/92 | 12/14/92 | 170SS |
| 213 | End Rad Lab Analysis/Turnaround | 0d | 7/6/93 | 7/6/93 | 170FS+90d |
| 214 | Receive Unvalidated Non Rad Data | 56.5d | 3/5/93 | 5/25/93 | |
| 215 | Begin Receiving Unvalidated Non Rad Data | 0d | 3/5/93 | 3/5/93 | 209FS+60d |
| 216 | Receive Final Unvalidated Non Rad Data | 0d | 5/25/93 | 5/25/93 | 210 |
| 217 | Receive Unvalidated Rad Data | 56.5d | 4/16/93 | 7/6/93 | |
| 218 | Begin Receiving Unvalidated Rad Data | 0d | 4/16/93 | 4/16/93 | 212FS+90d |
| 219 | Receive Final Unvalidated Rad Data | 0d | 7/6/93 | 7/6/93 | 213 |
| 220 | Validate Non Rad Data | 106.5d | 3/5/93 | 8/3/93 | |
| 221 | Begin Validating Non Rad Data | 0d | 3/5/93 | 3/5/93 | 215 |
| 222 | Finish Validating Non Rad Data | 0d | 8/3/93 | 8/3/93 | 216FS+50d |
| 223 | Validate Rad Data | 106.5d | 4/16/93 | 9/14/93 | |
| 224 | Begin Validating Rad Data | 0d | 4/16/93 | 4/16/93 | 218 |
| 225 | End Validating Rad Data | 0d | 9/14/93 | 9/14/93 | 219FS+50d |
| 226 | Receive Validated Non Rad Data | 56.5d | 5/14/93 | 8/3/93 | |
| 227 | Begin Receiving Validated Non Rad Data | 0d | 5/14/93 | 5/14/93 | 221FS+50d |
| 228 | Receive Final Validated Non Rad Data | 0d | 8/3/93 | 8/3/93 | 222 |
| 229 | Receive Validated Rad Data | 56.5d | 6/25/93 | 9/14/93 | |
| 230 | Begin Receiving Validated Rad Data | 0d | 6/25/93 | 6/25/93 | 224FS+50d |
| 231 | Receive Final Validated Rad Data | 0d | 9/14/93 | 9/14/93 | 225 |
| 232 | Interceptor Trench System | 167d | 12/28/92 | 8/17/93 | |
| 233 | Non Rad Data Lab Analysis/Turnaround | 87d | 12/28/92 | 4/27/93 | |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|--|----------|----------|-----------|--------------|
| 234 | Begin Non Rad Lab Analysis/Turnaround | 0d | 12/28/92 | 12/28/92 | 174SS |
| 235 | End Non Rad Lab Analysis/Turnaround | 0d | 4/27/93 | 4/27/93 | 174FS+60d |
| 236 | Rad Data Lab Analysis/Turnaround | 117d | 12/28/92 | 6/8/93 | |
| 237 | Begin Rad Lab Analysis/Turnaround | 0d | 12/28/92 | 12/28/92 | 174SS |
| 238 | End Rad Lab Analysis/Turnaround | 0d | 6/8/93 | 6/8/93 | 174FS+90d |
| 239 | Receive Unvalidated Non Rad Data | 27d | 3/19/93 | 4/27/93 | |
| 240 | Begin Receiving Unvalidated Non Rad Data | 0d | 3/19/93 | 3/19/93 | 234FS+60d |
| 241 | Receive Final Unvalidated Non Rad Data | 0d | 4/27/93 | 4/27/93 | 235 |
| 242 | Receive Unvalidated Rad Data | 27d | 4/30/93 | 6/8/93 | |
| 243 | Begin Receiving Unvalidated Non Rad Data | 0d | 4/30/93 | 4/30/93 | 237FS+90d |
| 244 | Receive Final Unvalidated Rad Data | 0d | 6/8/93 | 6/8/93 | 238 |
| 245 | Validate Non Rad Data | 77d | 3/19/93 | 7/6/93 | |
| 246 | Begin Validating Non Rad Data | 0d | 3/19/93 | 3/19/93 | 240 |
| 247 | Finish Validating Non Rad Data | 0d | 7/6/93 | 7/6/93 | 241FS+50d |
| 248 | Validate Rad Data | 77d | 4/30/93 | 8/17/93 | |
| 249 | Begin Validating Rad Data | 0d | 4/30/93 | 4/30/93 | 243 |
| 250 | End Validating Rad Data | 0d | 8/17/93 | 8/17/93 | 244FS+50d |
| 251 | Receive Validated Non Rad Data | 27d | 5/28/93 | 7/6/93 | |
| 252 | Begin Receiving Validated Non Rad Data | 0d | 5/28/93 | 5/28/93 | 246FS+50d |
| 253 | Receive Final Validated Non Rad Data | 0d | 7/6/93 | 7/6/93 | 247 |
| 254 | Receive Validated Rad Data | 27d | 7/9/93 | 8/17/93 | |
| 255 | Begin Receiving Validated Rad Data | 0d | 7/9/93 | 7/9/93 | 249FS+50d |
| 256 | Receive Final Validated Rad Data | 0d | 8/17/93 | 8/17/93 | 250 |
| 257 | Pond 207A | 163d | 3/10/93 | 10/22/93 | |
| 258 | Non Rad Data Lab Analysis/Turnaround | 84d | 3/10/93 | 7/5/93 | |
| 259 | Begin Non Rad Lab Analysis/Turnaround | 0d | 3/10/93 | 3/10/93 | 180SS |
| 260 | End Non Rad Lab Analysis/Turnaround | 1d | 7/5/93 | 7/5/93 | 180FS+60d |
| 261 | Rad Data Lab Analysis/Turnaround | 113d | 3/10/93 | 8/13/93 | |
| 262 | Begin Rad Lab Analysis/Turnaround | 0d | 3/10/93 | 3/10/93 | 180SS |
| 263 | End Rad Lab Analysis/Turnaround | 0d | 8/13/93 | 8/13/93 | 180FS+90d |
| 264 | Receive Unvalidated Non Rad Data | 24d | 6/1/93 | 7/5/93 | |
| 265 | Begin Receiving Unvalidated Non Rad Data | 0d | 6/1/93 | 6/1/93 | 259FS+60d |
| 266 | Receive Final Unvalidated Non Rad Data | 0d | 7/5/93 | 7/5/93 | 260 |
| 267 | Receive Unvalidated Rad Data | 23d | 7/13/93 | 8/13/93 | |
| 268 | Begin Receiving Unvalidated Non Rad Data | 0d | 7/13/93 | 7/13/93 | 262FS+90d |
| 269 | Receive Final Unvalidated Rad Data | 0d | 8/13/93 | 8/13/93 | 263 |
| 270 | Validate Non Rad Data | 74d | 6/1/93 | 9/13/93 | |
| 271 | Begin Validating Non Rad Data | 0d | 6/1/93 | 6/1/93 | 265 |
| 272 | Finish Validating Non Rad Data | 0d | 9/13/93 | 9/13/93 | 266FS+50d |
| 273 | Validate Rad Data | 73d | 7/13/93 | 10/22/93 | |
| 274 | Begin Validating Rad Data | 0d | 7/13/93 | 7/13/93 | 268 |
| 275 | End Validating Rad Data | 0d | 10/22/93 | 10/22/93 | 269FS+50d |
| 276 | Receive Validated Non Rad Data | 24d | 8/10/93 | 9/13/93 | |
| 277 | Begin Receiving Validated Non Rad Data | 0d | 8/10/93 | 8/10/93 | 271FS+50d |
| 278 | Receive Final Validated Non Rad Data | 0d | 9/13/93 | 9/13/93 | 272 |
| 279 | Receive Validated Rad Data | 23d | 9/21/93 | 10/22/93 | |
| 280 | Begin Receiving Validated Rad Data | 0d | 9/21/93 | 9/21/93 | 274FS+50d |
| 281 | Receive Final Validated Rad Data | 0d | 10/22/93 | 10/22/93 | 275 |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|--|----------|----------|-----------|--------------|
| 282 | Earthen Ponds | 182d | 1/13/93 | 9/23/93 | |
| 283 | Non Rad Data Lab Analysis/Turnaround | 102d | 1/13/93 | 6/3/93 | |
| 284 | Begin Non Rad Lab Analysis/Turnaround | 0d | 1/13/93 | 1/13/93 | 185SS |
| 285 | End Non Rad Lab Analysis/Turnaround | 0d | 6/3/93 | 6/3/93 | 185FS+60d |
| 286 | Rad Data Lab Analysis/Turnaround | 132d | 1/13/93 | 7/15/93 | |
| 287 | Begin Rad Lab Analysis/Turnaround | 0d | 1/13/93 | 1/13/93 | 185SS |
| 288 | End Rad Lab Analysis/Turnaround | 0d | 7/15/93 | 7/15/93 | 185FS+90d |
| 289 | Receive Unvalidated Non Rad Data | 42d | 4/6/93 | 6/3/93 | |
| 290 | Begin Receiving Unvalidated Non Rad Data | 0d | 4/6/93 | 4/6/93 | 284FS+60d |
| 291 | Receive Final Unvalidated Non Rad Data | 0d | 6/3/93 | 6/3/93 | 285 |
| 292 | Receive Unvalidated Rad Data | 42d | 5/18/93 | 7/15/93 | |
| 293 | Begin Receiving Unvalidated Non Rad Data | 0d | 5/18/93 | 5/18/93 | 287FS+90d |
| 294 | Receive Final Unvalidated Rad Data | 0d | 7/15/93 | 7/15/93 | 288 |
| 295 | Validate Non Rad Data | 92d | 4/6/93 | 8/12/93 | |
| 296 | Begin Validating Non Rad Data | 0d | 4/6/93 | 4/6/93 | 290 |
| 297 | Finish Validating Non Rad Data | 0d | 8/12/93 | 8/12/93 | 291FS+50d |
| 298 | Validate Rad Data | 92d | 5/18/93 | 9/23/93 | |
| 299 | Begin Validating Rad Data | 0d | 5/18/93 | 5/18/93 | 293 |
| 300 | End Validating Rad Data | 0d | 9/23/93 | 9/23/93 | 294FS+50d |
| 301 | Receive Validated Non Rad Data | 42d | 6/15/93 | 8/12/93 | |
| 302 | Begin Receiving Validated Non Rad Data | 0d | 6/15/93 | 6/15/93 | 296FS+50d |
| 303 | Receive Final Validated Non Rad Data | 0d | 8/12/93 | 8/12/93 | 297 |
| 304 | Receive Validated Rad Data | 42d | 7/27/93 | 9/23/93 | |
| 305 | Begin Receiving Validated Rad Data | 0d | 7/27/93 | 7/27/93 | 299FS+50d |
| 306 | Receive Final Validated Rad Data | 0d | 9/23/93 | 9/23/93 | 300 |
| 307 | Radiologically Controlled Area (RCA) | 217d | 1/8/93 | 11/8/93 | |
| 308 | Non Rad Data Lab Analysis/Turnaround | 137d | 1/8/93 | 7/19/93 | |
| 309 | Begin Non Rad Lab Analysis/Turnaround | 0d | 1/8/93 | 1/8/93 | 189SS |
| 310 | End Non Rad Lab Analysis/Turnaround | 0d | 7/19/93 | 7/19/93 | 189FS+60d |
| 311 | Rad Data Lab Analysis/Turnaround | 167d | 1/8/93 | 8/30/93 | |
| 312 | Begin Rad Lab Analysis/Turnaround | 0d | 1/8/93 | 1/8/93 | 189SS |
| 313 | End Rad Lab Analysis/Turnaround | 0d | 8/30/93 | 8/30/93 | 189FS+90d |
| 314 | Receive Unvalidated Non Rad Data | 77d | 4/1/93 | 7/19/93 | |
| 315 | Begin Receiving Unvalidated Non Rad Data | 0d | 4/1/93 | 4/1/93 | 309FS+60d |
| 316 | Receive Final Unvalidated Non Rad Data | 0d | 7/19/93 | 7/19/93 | 310 |
| 317 | Receive Unvalidated Rad Data | 77d | 5/13/93 | 8/30/93 | |
| 318 | Begin Receiving Unvalidated Non Rad Data | 0d | 5/13/93 | 5/13/93 | 312FS+90d |
| 319 | Receive Final Unvalidated Rad Data | 0d | 8/30/93 | 8/30/93 | 313 |
| 320 | Validate Non Rad Data | 127d | 4/1/93 | 9/27/93 | |
| 321 | Begin Validating Non Rad Data | 0d | 4/1/93 | 4/1/93 | 315 |
| 322 | Finish Validating Non Rad Data | 0d | 9/27/93 | 9/27/93 | 316FS+50d |
| 323 | Validate Rad Data | 127d | 5/13/93 | 11/8/93 | |
| 324 | Begin Validating Rad Data | 0d | 5/13/93 | 5/13/93 | 318 |
| 325 | End Validating Rad Data | 0d | 11/8/93 | 11/8/93 | 319FS+50d |
| 326 | Receive Validated Non Rad Data | 77d | 6/10/93 | 9/27/93 | |
| 327 | Begin Receiving Validated Non Rad Data | 0d | 6/10/93 | 6/10/93 | 321FS+50d |
| 328 | Receive Final Validated Non Rad Data | 0d | 9/27/93 | 9/27/93 | 322 |
| 329 | Receive Validated Rad Data | 77d | 7/22/93 | 11/8/93 | |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|--|----------|----------|-----------|--------------|
| 330 | Begin Receiving Validated Rad Data | 0d | 7/22/93 | 7/22/93 | 324FS+50d |
| 331 | Receive Final Validated Rad Data | 0d | 11/8/93 | 11/8/93 | 325 |
| 332 | Environmental Evaluation | 208.5d | 4/13/93 | 1/28/94 | |
| 333 | Non Rad Data Lab Analysis/Turnaround | 128.5d | 4/13/93 | 10/8/93 | |
| 334 | Begin Non Rad Lab Analysis/Turnaround | 0d | 4/13/93 | 4/13/93 | 456SS |
| 335 | End Non Rad Lab Analysis/Turnaround | 0d | 10/8/93 | 10/8/93 | 456FS+60d |
| 336 | Rad Data Lab Analysis/Turnaround | 158.5d | 4/13/93 | 11/19/93 | |
| 337 | Begin Rad Lab Analysis/Turnaround | 0d | 4/13/93 | 4/13/93 | 456SS |
| 338 | End Rad Lab Analysis/Turnaround | 0d | 11/19/93 | 11/19/93 | 456FS+90d |
| 339 | Receive Unvalidated Non Rad Data | 68.5d | 7/6/93 | 10/8/93 | |
| 340 | Begin Receiving Unvalidated Non Rad Data | 0d | 7/6/93 | 7/6/93 | 334FS+60d |
| 341 | Receive Final Unvalidated Non Rad Data | 0d | 10/8/93 | 10/8/93 | 335 |
| 342 | Receive Unvalidated Rad Data | 68.5d | 8/17/93 | 11/19/93 | |
| 343 | Begin Receiving Unvalidated Non Rad Data | 0d | 8/17/93 | 8/17/93 | 337FS+90d |
| 344 | Receive Final Unvalidated Rad Data | 0d | 11/19/93 | 11/19/93 | 338 |
| 345 | Validate Non Rad Data | 118.5d | 7/6/93 | 12/17/93 | |
| 346 | Begin Validating Non Rad Data | 0d | 7/6/93 | 7/6/93 | 340 |
| 347 | Finish Validating Non Rad Data | 0d | 12/17/93 | 12/17/93 | 341FS+50d |
| 348 | Validate Rad Data | 118.5d | 8/17/93 | 1/28/94 | |
| 349 | Begin Validating Rad Data | 0d | 8/17/93 | 8/17/93 | 343 |
| 350 | End Validating Rad Data | 0d | 1/28/94 | 1/28/94 | 344FS+50d |
| 351 | Receive Validated Non Rad Data | 68.5d | 9/14/93 | 12/17/93 | |
| 352 | Begin Receiving Validated Non Rad Data | 0d | 9/14/93 | 9/14/93 | 346FS+50d |
| 353 | Receive Final Validated Non Rad Data | 0d | 12/17/93 | 12/17/93 | 347 |
| 354 | Receive Validated Rad Data | 68.5d | 10/26/93 | 1/28/94 | |
| 355 | Begin Receiving Validated Rad Data | 0d | 10/26/93 | 10/26/93 | 349FS+50d |
| 356 | Receive Final Validated Rad Data | 0d | 1/28/94 | 1/28/94 | 350 |
| 357 | | | | | |
| 358 | BASELINE RISK ASSESSMENT | 548d | 1/1/92 | 2/4/94 | |
| 359 | Data Collection & Evaluation | 371d | 9/4/92 | 2/4/94 | |
| 360 | Collect Historic Data | 27.4w | 9/4/92 | 3/15/93 | |
| 361 | Evaluate Historic Data | 35d | 3/16/93 | 5/3/93 | 360 |
| 362 | Evaluate Non-Rad Data | 210d | 3/5/93 | 12/24/93 | |
| 363 | Around Ponds | 111.5d | 3/5/93 | 8/10/93 | |
| 364 | Start | 0d | 3/5/93 | 3/5/93 | 215SS |
| 365 | Finish | 0d | 8/10/93 | 8/10/93 | 228FS+1w |
| 366 | ITS | 82d | 3/19/93 | 7/13/93 | |
| 367 | Start | 0d | 3/19/93 | 3/19/93 | 240 |
| 368 | Finish | 0d | 7/13/93 | 7/13/93 | 253FS+1w |
| 369 | Pond 207A | 79d | 6/1/93 | 9/20/93 | |
| 370 | Start | 0d | 6/1/93 | 6/1/93 | 265SS |
| 371 | Finish | 0d | 9/20/93 | 9/20/93 | 278FS+1w |
| 372 | Earthen Ponds | 97d | 4/6/93 | 8/19/93 | |
| 373 | Start | 0d | 4/6/93 | 4/6/93 | 290SS |
| 374 | Finish | 0d | 8/19/93 | 8/19/93 | 303FS+1w |
| 375 | Radiologically Controlled Area (RCA) | 132d | 4/1/93 | 10/4/93 | |
| 376 | Start | 0d | 4/1/93 | 4/1/93 | 315SS |
| 377 | Finish | 0d | 10/4/93 | 10/4/93 | 328FS+1w |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|---|----------|----------|-----------|--------------|
| 378 | Environmental Evaluation | 123.5d | 7/6/93 | 12/24/93 | |
| 379 | Start | 0d | 7/6/93 | 7/6/93 | 340SS |
| 380 | Finish | 0d | 12/24/93 | 12/24/93 | 353FS+1w |
| 381 | Evaluate Rad Data | 210d | 4/16/93 | 2/4/94 | |
| 382 | Around Ponds | 111.5d | 4/16/93 | 9/21/93 | |
| 383 | Start | 0d | 4/16/93 | 4/16/93 | 218SS |
| 384 | Finish | 0d | 9/21/93 | 9/21/93 | 231FS+1w |
| 385 | ITS | 82d | 4/30/93 | 8/24/93 | |
| 386 | Start | 0d | 4/30/93 | 4/30/93 | 243SS |
| 387 | Finish | 0d | 8/24/93 | 8/24/93 | 256FS+1w |
| 388 | Pond 207A | 78d | 7/13/93 | 10/29/93 | |
| 389 | Start | 0d | 7/13/93 | 7/13/93 | 268SS |
| 390 | Finish | 0d | 10/29/93 | 10/29/93 | 281FS+1w |
| 391 | Earthen Ponds | 97d | 5/18/93 | 9/30/93 | |
| 392 | Start | 0d | 5/18/93 | 5/18/93 | 293SS |
| 393 | Finish | 0d | 9/30/93 | 9/30/93 | 306FS+1w |
| 394 | Radiologically Controlled Area (RCA) | 132d | 5/13/93 | 11/15/93 | |
| 395 | Start | 0d | 5/13/93 | 5/13/93 | 318SS |
| 396 | Finish | 0d | 11/15/93 | 11/15/93 | 331FS+1w |
| 397 | Environmental Evaluation | 123.5d | 8/17/93 | 2/4/94 | |
| 398 | Start | 0d | 8/17/93 | 8/17/93 | 343SS |
| 399 | Finish | 0d | 2/4/94 | 2/4/94 | 356FS+1w |
| 400 | Human Health Risk Assessment | 268d | 1/4/93 | 1/12/94 | |
| 401 | Exposure Scenarios - TM4 | 91d | 1/4/93 | 5/10/93 | |
| 402 | Prepare Tech Memo | 6.8w | 1/4/93 | 2/18/93 | 361 |
| 403 | Submit Draft Tech Memo to EG&G/DOE | 0d | 2/19/93 | 2/19/93 | 402 |
| 404 | EG&G/DOE Review | 10d | 2/19/93 | 3/4/93 | 403 |
| 405 | Incorporate Comments | 5d | 3/5/93 | 3/11/93 | 404 |
| 406 | Submit Revised Draft Tech Memo | 0d | 3/11/93 | 3/11/93 | 405 |
| 407 | Transmittal Processing - EPA/CDH | 2d | 3/12/93 | 3/15/93 | 406 |
| 408 | EPA/CDH Review | 20d | 3/16/93 | 4/12/93 | 407 |
| 409 | Resolve Comments and Finalize TM | 10d | 4/13/93 | 4/26/93 | 408 |
| 410 | Submit Final Tech Memo | 0d | 4/26/93 | 4/26/93 | 409 |
| 411 | EPA/CDH Final Approval | 10d | 4/27/93 | 5/10/93 | 410 |
| 412 | Exposure Models - TM5 | 97d | 1/29/93 | 6/14/93 | |
| 413 | Prepare Tech Memo | 8w | 1/29/93 | 3/25/93 | |
| 414 | Submit Draft Tech Memo to EG&G/DOE | 0d | 3/25/93 | 3/25/93 | 413 |
| 415 | EG&G/DOE Review | 10d | 3/26/93 | 4/8/93 | 414 |
| 416 | Incorporate Comments | 5d | 4/9/93 | 4/15/93 | 415 |
| 417 | Submit Draft Tech Memo | 0d | 4/15/93 | 4/15/93 | 416 |
| 418 | Transmittal Processing - EPA/CDH | 2d | 4/16/93 | 4/19/93 | 417 |
| 419 | EPA/CDH Review | 20d | 4/20/93 | 5/17/93 | 418 |
| 420 | Resolve Comments and Finalize Tech Memo | 10d | 5/18/93 | 5/31/93 | 419 |
| 421 | Submit Final Tech Memo | 0d | 5/31/93 | 5/31/93 | 420 |
| 422 | EPA/CDH Final Approval | 10d | 6/1/93 | 6/14/93 | 421 |
| 423 | Contaminants of Concern - TM6 | 91d | 9/7/93 | 1/11/94 | |
| 424 | Prepare Tech Memo | 6w | 9/7/93 | 10/18/93 | 396FS-10w |
| 425 | Submit Draft Tech Memo to EG&G/DOE | 0d | 10/18/93 | 10/18/93 | 424 |

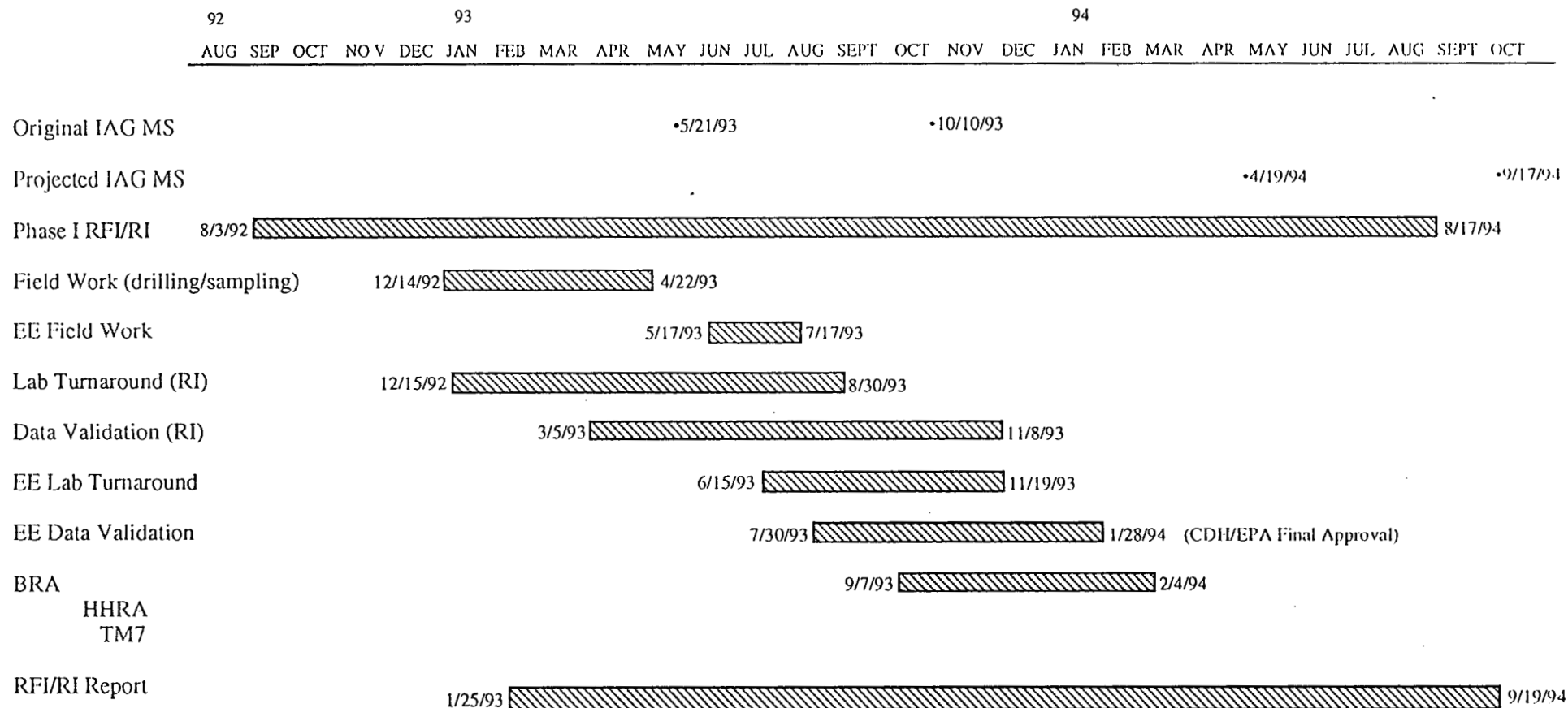
OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|--|----------|----------|-----------|--------------|
| 426 | EG&G/DOE Review | 10d | 10/19/93 | 11/1/93 | 425 |
| 427 | Incorporate Comments | 9d | 11/2/93 | 11/12/93 | 426 |
| 428 | Submit Revised Draft Tech Memo | 0d | 11/12/93 | 11/12/93 | 427 |
| 429 | Transmittal Processing - EPA/CDH | 2d | 11/15/93 | 11/16/93 | 428 |
| 430 | EPA/CDH Review | 20d | 11/17/93 | 12/14/93 | 429 |
| 431 | Resolve Comments and Finalize TM | 10d | 12/15/93 | 12/28/93 | 430 |
| 432 | Submit Final Tech Memo | 0d | 12/28/93 | 12/28/93 | 431 |
| 433 | EPA/CDH Final Approval | 10d | 12/29/93 | 1/11/94 | 432 |
| 434 | Toxicity Assessment - TM7 | 82d | 9/21/93 | 1/12/94 | |
| 435 | Prepare Tech Memo | 4w | 9/21/93 | 10/18/93 | 396FS-8w |
| 436 | Submit Draft Tech Memo to EG&G/DOE | 0d | 10/18/93 | 10/18/93 | 435 |
| 437 | EG&G/DOE Review | 10d | 10/19/93 | 11/1/93 | 436 |
| 438 | Incorporate Comments | 10d | 11/2/93 | 11/15/93 | 437 |
| 439 | Submit Draft Tech Memo | 0d | 11/15/93 | 11/15/93 | 438 |
| 440 | Transmittal Processing - EPA/CDH | 2d | 11/16/93 | 11/17/93 | 439 |
| 441 | EPA/CDH Review | 20d | 11/18/93 | 12/15/93 | 440 |
| 442 | Resolve Comments and Finalize Tech Memo | 10d | 12/16/93 | 12/29/93 | 441 |
| 443 | Submit Final Tech Memo | 0d | 12/29/93 | 12/29/93 | 442 |
| 444 | EPA/CDH Final Approval | 10d | 12/30/93 | 1/12/94 | 443 |
| 445 | Environmental Evaluation | 514d | 1/1/92 | 12/20/93 | |
| 446 | Data Review, Consultations | 6.5w | 1/1/93 | 2/16/93 | |
| 447 | Site Specific Conceptual Exposure Model | 8w | 2/16/93 | 4/13/93 | 446 |
| 448 | Transport Model to ID Potential Pathways | 9w | 2/9/93 | 4/13/93 | 446FS-5d |
| 449 | Select Target Taxa & Analytes | 9w | 2/9/93 | 4/13/93 | 446FS-5d |
| 450 | Field Investigations | 45d | 5/17/93 | 7/17/93 | 447,448,449 |
| 451 | Biological & Habitat Site Surveys | 30d | 5/17/93 | 6/26/93 | |
| 452 | Habitat Survey | 6w | 5/17/93 | 6/26/93 | |
| 453 | Animal Survey | 3d | 5/17/93 | 5/19/93 | |
| 454 | Vegetation Survey | 6w | 5/17/93 | 6/26/93 | |
| 455 | Mammal Survey | 2w | 6/14/93 | 6/26/93 | |
| 456 | Ecotoxicological Investigation | 25d | 6/14/93 | 7/17/93 | |
| 457 | Soil Pits/Sampling | 1w | 7/12/93 | 7/17/93 | |
| 458 | Small Mammal Sampling | 1w | 7/12/93 | 7/17/93 | |
| 459 | Vegetation Sampling | 1w | 7/12/93 | 7/17/93 | |
| 460 | Cottontail Sampling | 5w | 6/14/93 | 7/17/93 | |
| 461 | EE Portion of BRA | 453d | 1/1/92 | 9/24/93 | |
| 462 | EE Portion of BRA | 126d | 6/28/93 | 12/20/93 | |
| 463 | Habitat Survey Report | 3w | 6/28/93 | 7/16/93 | 452 |
| 464 | Biological Survey Report | 15d | 6/28/93 | 7/16/93 | 453,454,455 |
| 465 | Ecotoxicological Report | 55d | 10/5/93 | 12/20/93 | |
| 466 | Start Report | 0d | 10/5/93 | 10/5/93 | 396FS-6w |
| 467 | Finish Report | 0d | 12/20/93 | 12/20/93 | 396FS+5w |
| 468 | | | | | |
| 469 | DATA EVALUATION & REPORT PREPARATION | 583d | 9/4/92 | 11/29/94 | |
| 470 | Collect Historic Data | 27.4w | 9/4/92 | 3/15/93 | |
| 471 | Evaluate Historic Data | 35d | 3/16/93 | 5/3/93 | 470 |
| 472 | Prepare Draft Phase I RFI/RI Report | 270d | 1/25/93 | 2/4/94 | 358FF |
| 473 | Submit Draft Phase I RFI/RI Report to EG&G | 0d | 2/4/94 | 2/4/94 | 472 |

OU4 SOLAR PONDS PHASE I RFI/RI COMMITMENT SCHEDULE

| ID | Task Name | Duration | Sched St | Sched Fin | Predecessors |
|-----|---|----------|----------|-----------|--------------|
| 474 | Transmittal Processing to DOE/HQ | 5d | 2/7/94 | 2/11/94 | 473 |
| 475 | DOE-HQ Review of Draft RFI/RI Report | 21d | 2/14/94 | 3/14/94 | 474 |
| 476 | EG&G/DOE-RFO Review of Draft RFI/RI Report | 21d | 2/14/94 | 3/14/94 | 474 |
| 477 | Incorporate Comments and Finalize | 21d | 3/15/94 | 4/12/94 | 475,476 |
| 478 | Transmittal Processing | 5d | 4/13/94 | 4/19/94 | 477 |
| 479 | Submit Draft RFI/RI Report to EPA/CDH | 0d | 4/19/94 | 4/19/94 | 478 |
| 480 | EPA/CDH Review Draft RFI/RI Report | 62d | 4/20/94 | 7/14/94 | 479 |
| 481 | Receive EPA/CDH Comments on Draft RFI/RI Report | 0d | 7/14/94 | 7/14/94 | 480 |
| 482 | Incorporate Comments and Finalize | 42d | 7/15/94 | 9/12/94 | 481 |
| 483 | Transmittal Processing | 5d | 9/13/94 | 9/19/94 | 482 |
| 484 | Submit Final RFI/RI Report | 0d | 9/19/94 | 9/19/94 | 483 |
| 485 | EPA/CDH Review of Final RFI/RI Report | 21d | 9/20/94 | 10/18/94 | 484 |
| 486 | Incorporate Comments and Finalize RFI/RI Report | 25d | 10/19/94 | 11/22/94 | 485 |
| 487 | Transmittal Processing to EPA/CDH | 5d | 11/23/94 | 11/29/94 | 486 |
| 488 | EPA/CDH Final Approval | 0d | 11/29/94 | 11/29/94 | 487 |

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NOTE: PORTIONS OF THE ABOVE ACTIVITIES ARE ON THE CRITICAL PATH